

CLAIMS

1. A valve comprising a body having a valve seat formed therein, a bonnet, and a diaphragm abutting against and moving away from said valve seat, said body  
5 and said bonnet clamping and holding a peripheral edge of said diaphragm so as to seal the fluid inside said body,  
said valve characterized in that said valve further comprises an elastic member, said body is formed with an annular groove extending around said valve  
10 seat, said diaphragm is provided at the peripheral edge thereof with an annular engagement part formed to have an approximate L-shape in cross-section, and said annular engagement part is fitted into said annular groove in a tight state by said elastic member disposed between said  
15 bonnet and said annular engagement part of said diaphragm.

2. The valve according to claim 1, wherein said annular groove has an inner side surface inclined downward toward the outside and said elastic member has  
20 an inner circumference inclined corresponding to said inclined surface of said annular groove.

3. The valve according to claim 1, wherein said elastic member is an O-ring.

4. The valve according to claim 1, wherein an  
25 annular projection abutting against the surface of the diaphragm is provided at the bottom surface of the annular groove.

5. The valve according to claim 1, wherein an  
30 annular projection abutting against the surface of said diaphragm is provided at the part of the surface of said body clamping said diaphragm with said bonnet.